

WHAT IS CLAIMED IS:

1. A process of producing an acrylic pressure-sensitive adhesive comprising continuously feeding a monomer mainly comprising at least one alkyl (meth)acrylate,
5 a radical polymerization initiator and carbon dioxide to a continuous reactor through a mixer and performing continuous bulk polymerization at a polymerization temperature of 50 to 180°C for a residence time of 0.5 to 60 minutes in a continuous reaction zone of said reactor.

10 2. The process as claimed in claim 1, wherein said polymerization temperature is 65 to 130°C.

3. An acrylic pressure-sensitive adhesive obtained by the process as claimed in claim 1.

15 4. The acrylic pressure-sensitive adhesive as claimed in claim 3, which comprises 10% by weight or less, based on the weight of the total monomers, of components having a weight average molecular weight of 100,000 or less.

20 5. The acrylic pressure-sensitive adhesive as claimed in claim 3, which comprises 6.5% by weight or less, based on the weight of the total monomers, of components having a weight average molecular weight of 100,000 or less.

25 6. A process of producing an acrylic pressure-sensitive adhesive comprising continuously feeding a monomer mainly comprising at least one alkyl (meth)acrylate, a radical polymerization initiator and carbon dioxide to a continuous reactor through a mixer and performing continuous bulk polymerization at a polymerization temperature of 50

to 100°C for a residence time of 60 to 200 minutes in a continuous reaction zone of said reactor.

7. The process as claimed in claim 6, wherein said polymerization temperature is 50 to 80°C.

5 8. An acrylic pressure-sensitive adhesive obtained by the process as claimed in claim 6.

9. The acrylic pressure-sensitive adhesive as claimed in claim 8, which comprises 10% by weight or less, based on the weight of the total monomers, of components having a weight average molecular weight of 100,000 or less.

10 10. The acrylic pressure-sensitive adhesive as claimed in claim 8, which comprises 6.5% by weight or less, based on the weight of the total monomers, of components having a weight average molecular weight of 100,000 or less.